

The embodiments of the invention in which an exclusive privilege or property is claimed are defined as follows:

1. A method for using a tissue margin of an excised tissue specimen and a coating gel to form a sample block sliceable into sample slices, said tissue margin defining a peripheral section and a core section, said tissue margin also defining a shallow surface and a substantially opposed deep surface, said method comprising the steps of:
 - positioning said tissue margin on a substantially flat tissue supporting surface with said deep surface positioned adjacent or against said tissue supporting surface;
 - covering said tissue margin with an initial volume of coating gel;
 - using a mold for molding said tissue margin covered by said initial volume of coating gel into said sample block having a predetermined configuration and a predetermined size;
 - at least partially freezing said sample block while said sample block remains inserted in said mold;
 - removing said sample block from said mold.
2. A method as recited in claim 1 wherein said tissue margin has a substantially non-flat configuration, said method further comprising the step of substantially flattening said tissue margin prior to covering said tissue margin with an initial volume of coating gel.

3. A method as recited in claim 2 wherein flattening said tissue margin includes making at least one substantially superficial incision in said shallow surface.

4. A device for using tissue margin of an excised tissue specimen and a coating gel to form a sample block sliceable into sample slices, said tissue margin defining a peripheral section and a core section, said tissue margin also defining a shallow surface and a substantially opposed deep surface, said device comprising:

- a piston component, said piston component including a tissue supporting surface, said tissue supporting surface defining a supporting surface peripheral edge;
- a sleeve component, said sleeve component defining a sleeve channel and a sleeve longitudinal axis; said sleeve component having a sleeve wall delimiting said sleeve channel, said sleeve wall defining a sleeve first end, a sleeve second end, a sleeve inner surface and a sleeve outer surface, said sleeve wall being configured and sized for substantially fittingly receiving said piston component and allowing reciprocating movement thereof along said sleeve longitudinal axis with said supporting surface peripheral edge in a substantially adjacent relationship relative to said sleeve inner surface;
- a molding plate, said molding plate including a molding surface; said molding plate being configured and sized so as to be positionnable in a plate molding configuration wherein said molding surface extends across said sleeve channel substantially adjacent said sleeve first end;
- whereby when said molding plate is in said plate molding configuration said molding surface, said supporting surface and said sleeve inner surface together encompass a molding volume for molding said sample block.

5. A device as recited in claim 4 wherein said molding plate defines an auxiliary surface positioned opposite said molding surface and a spacing surface extending between said molding and auxiliary surfaces, said molding plate being provided with a sealing ring extending substantially outwardly from said spacing surface.

6. A device as recited in claim 4 wherein said molding plate defines an auxiliary surface positioned opposite said molding surface, said molding plate being provided with a grasping rod extending substantially outwardly from said auxiliary surface for facilitating the manipulation of said molding plate.

7. A device as recited in claim 4 further comprising alignment means for aligning said molding surface in a substantially parallel relationship with said supporting surface.

8. A device as recited in claim 7 wherein said alignment means includes an abutment shoulder formed in said sleeve wall adjacent said sleeve first end, said abutment shoulder being configured, sized and positioned for abuttingly supporting said molding plate in said plate molding configuration.

9. A device as recited in claim 4 further comprising a plate releasable locking means for releasably locking said molding plate in said plate molding configuration.

10. A device as recited in claim 9 wherein said plate releasable locking means includes a locking component, said locking component being configured and sized so as to be operationally

positionable between said molding plate and said sleeve wall for maintaining said molding plate and said sleeve wall in a predetermined relationship relative to each other, said locking component being provided with a freezing aperture extending therethrough for allowing the flow of a freezing fluid through said freezing aperture towards said molding plate.

11. A device as recited in claim 9 wherein said plate releasable locking means includes a locking component, said locking component including a locking ring and a locking lip, said locking ring being configured and sized for operative engagement with said sleeve component, said locking lip being configured and sized for abutting against said auxiliary surface when said locking ring is operatively engaged with said sleeve component.

12. A device as recited in claim 11 wherein said locking ring is provided with an inner thread formed on an inner surface thereof and said sleeve component is provided with an outer thread formed on said sleeve outer surface for threadable engagement with said inner thread; said locking lip having a lip spacing segment extending substantially inwardly from the inner surface of said locking ring and a lip abutment segment extending substantially perpendicularly from said lip spacing segment for contacting said auxiliary surface.

13. A device as recited in claim 12 wherein said sleeve wall includes an abutment shoulder formed therein adjacent said sleeve first end, said abutment shoulder being configured, sized and positioned for abuttingly supporting said molding plate in said plate molding configuration; said sleeve wall also including a substantially axial sleeve flange extending from said abutment shoulder; said locking ring being provided with a ring spacing segment extending between said

inner thread and said locking lip for accommodating said sleeve flange.

14. A device as recited in claim 4 further comprising a piston positioning means for axially positioning said piston component at a predetermined axial position relative to said sleeve channel.

15. A device as recited in claim 14 wherein said piston positioning means allows said supporting surface to be moved between a piston molding position and a piston discharging position wherein said supporting surface is respectively positioned within said sleeve channel and axially outwardly relative to said piston channel; whereby said supporting surface allows said sample block to be molded when in said molding position and separated from said supporting surface when in said discharging position.

16. A device as recited in claim 14 wherein said piston positioning means includes a positioning rod extending from said piston component substantially opposite said supporting surface, said positioning rod being provided with effective length adjustment means for allowing adjustment of the effective length thereof used for adjusting the axial position of said piston component relative to said sleeve channel.

17. A device as recited in claim 16 wherein said effective length adjustment means includes

- a rod external thread formed on said positioning rod;
- a positioning flange extending inwardly from said sleeve inner surface adjacent said sleeve second end, said positioning flange being provided with a flange thread for threadably

cooperating with said rod external thread in axially displacing said positioning rod relative to said sleeve component.

18. A device as recited in claim 17 further comprising a base plate attached to said positioning rod opposite said piston component, said base plate being configured and sized for facilitating the manual rotation of said positioning rod.

19. A device as recited in claim 18 wherein said base plate is configured and sized so as to be usable as a device base positionable on a supporting surface for supporting said device in a substantially upright configuration.

20. A device for transforming a tissue margin of an excised tissue specimen into a sample block sliceable into sample slices, said tissue margin defining a peripheral section and a core section, said tissue margin also defining a shallow surface and a substantially opposed deep surface, said device comprising:

- a tissue supporting component having a tissue supporting surface for supporting said tissue margin, said tissue supporting surface defining a supporting surface peripheral edge;
- a molding structure for together with said tissue supporting surface providing a molding space of adjustable size, said molding structure including a peripheral molding wall extending substantially perpendicularly relative to said tissue supporting surface adjacent said supporting surface peripheral edge, said molding structure including a size adjustment means for allowing adjustment of the size of said peripheral molding wall; said molding structure also including an auxiliary molding wall extending in a substantially parallel and spaced relationship relative to

said tissue supporting surface;

- a facilitating means for facilitating the freezing of said sample block.